

September 6, 2018

To: Members
Public Works and Infrastructure Committee

Re: Snow Routes Pilot Program Update

RECOMMENDATION

1. That the Snow Routes Pilot Program implemented in 2017/18, become part of a regular winter maintenance program.
2. That the snow routes be expanded to include an additional 11km section on the following Arterial and Collector streets, for the 2019/2020 winter season be approved;
 - i. Victoria Avenue (Albert Street to Pasqua Street)
 - ii. Winnipeg Street (College Avenue to Broadway Avenue)
 - iii. Winnipeg Street (Victoria Avenue to Ross Avenue)
 - iv. Broadway Avenue (Broad Street to Park Street)
 - v. 13th Avenue (Toronto Street to Broad Street)
 - vi. 14th Avenue (Toronto Street to Winnipeg Street)
 - vii. 14th Avenue (Albert Street to Halifax Street)
 - viii. 15th Avenue (Winnipeg Street to Elphinstone Street)
 - ix. Toronto Street (Victoria Avenue to College Avenue)
3. That Administration bring updates on snow routes, as part of the Annual Winter Maintenance report.
4. That the City Solicitor be directed to prepare the necessary amendments to *Regina Traffic Bylaw No. 9900* (Bylaw) to authorize the requirements for an expanded Snow Routes Program, as detailed in Appendix A to this report.
5. That \$70,000 of the 2019 Winter Road Maintenance operating budget be used to fund the capital and operating expenses associated with the implementation of an expanded Snow Routes Program.
6. That this report be forwarded to the September 24, 2018 City Council meeting for approval.

CONCLUSION

This report is based on the recommendation of report *CR17-7 Snow Routes Pilot Program* and provides feedback on the Snow Routes Pilot Program, successfully implemented on five km of road network during the 2017/2018 winter season.

Based on benchmark data, the Snow Routes Pilot Program did provide both operational efficiencies and improved traffic flow on streets cleared under the program.

Additionally, based on the positive response of the resident survey conducted after the pilot season, Administration recommends continuing with the current program, while strategically expanding the program to an additional 11 km of arterial and collector roads during the 2019/2020 winter season.

The pilot evaluation found that roadway travel widths after clearing and voluntary compliance with the parking bans were all positive factors in the initial program.

The 2018/2019 winter season will also be used to study the road sections proposed under the expansion plan and prepare for any changes that may be required operationally. Based on the timeframes to install additional signage and the communications required, Administration is recommending that any capital investments (signage and communications) related to expanding the program would be funded through carry forward from the initial pilot and through the winter maintenance operating budget. Work to expand the program would be carried out during Q2 and Q3 of 2019.

BACKGROUND

At the January 30, 2017 meeting of Council report *CR17-7* was presented with the following recommendations:

1. *That City Council authorizes the implementation of a Snow Routes Pilot Program (the "Pilot Program") on a 5km section on the following Category 1 and 2 streets, beginning in the fall of 2017 and through the 2017/2018 winter season:*
 - i. *Victoria Avenue (Broad Street to Winnipeg Street);*
 - ii. *Winnipeg Street (Victoria Avenue to College Avenue); and*
 - iii. *College Avenue (Winnipeg Street to Abbott Road).*
2. *That City Council approve the enforcement of a parking ban when declared on streets selected for the Pilot Program, as Snow Routes.*
3. *That City Council directs Administration to bring back a report in 2018 that evaluates the effectiveness of the Pilot Program, with future recommendations.*
4. *That City Council instructs the City Solicitor's office to prepare amendments to The Regina Traffic Bylaw, 1997, No. 9900 (the "Bylaw") to incorporate the requirements for the Pilot Program as detailed in Appendix C to this report.*
5. *That City Council authorizes \$85,000 of the 2016 Winter Road Maintenance operating budget be used to fund the capital and operating expenses associated with the implementation of the Pilot Program.*

Based on the above approval by City Council, a Snow Routes Pilot Program was launched in the

2017/2018 winter season on five km of roads identified as good candidates during initial research. Benchmarking data was collected during the 2016/2017 season to measure the effectiveness of the initial pilot program.

DISCUSSION

Analysis of the initial season indicates that there are significant operational efficiencies and safer end conditions as follows:

- On an average, it took approximately 20 per cent less time to complete plowing of the snow routes with the parking bans in place.
- The average time taken to complete plowing during the 2017/2018 pilot was 51 minutes.
- The average time taken to complete plowing during the 2016/2017 pre-pilot was 62 minutes.
- There was 35 per cent additional lane width achieved during the 2017/2018 pilot for traffic to travel these sections of road, due to better snow clearing.
- There was 36 per cent reduction achieved during the 2017/2018 pilot in maximum snow ridge height, due to uniform distribution of snow along the route.
- Public perception was positive through the Feedback Survey conducted shortly after the first season; of the 848 residents, more than 70 per cent were in favour of expanding the program.

Key highlights of the data from the pilot and findings from the resident survey can be found in Appendix B.

Administration explored three options with respect to the expansion of the Snow Routes Program. These options are:

Option 1 - Status Quo: Snow Routes on existing 5 km of Pilot locations: (Not Recommended)

This option would retain the current 5 km of roads considered as snow routes, but no further expansion would occur at this time.

Advantages:

- Minimal cost to continue running the Snow Routes Program on the 5 km stretch
- No need to remove existing Snow Routes Signage installed on these sections of roads

Disadvantages:

- Will not fully satisfy the strong support of the residents to have an expanded Snow Routes Program, as indicated by survey findings (2016 and 2018 surveys)
- Limits the program to 5 km which does not address all areas of concern due to parked vehicles during the winter season
- The potential to increase operational efficiencies will not be realized

Option 2: Staged Expansion – Add 11 km to current program during 2019/2020 season: (Recommended Option)

This option was developed based on feedback from the public and internal stakeholders. Data analysis done during the pilot season indicated that the program did deliver measurable improvements. Additional roads were identified based on proximity to the current program area and are trouble spots due to a high volume of on street parked vehicles. This can cause internal stakeholders, such as Winter Maintenance operators, Transit Services, Traffic operations and Emergency Services, issues during the winter months.

Further changes to the *Regina Traffic Bylaw, No. 9900* are required to expand the program, see Appendix A.

Advantages:

- Staged implementation will enable replicating the successful implementation of the program on a 5 km section during 2017/2018 by utilizing the learnings from the pilot. A staged expansion of the program on relatively smaller street sections can be managed more effectively.
- Expansion to highly critical streets as identified by various internal stakeholders, will address trouble spots first, while continuing towards a city-wide Snow Routes Program.
- Supporting areas are well equipped to support the expansion of the program on an additional 11 km to replicate success.
- Roads identified under this option generally have alternate parking locations available in the vicinity. This includes the roads around the hospital area, where Saskatchewan Health Authority provides hospital staff a Park & Ride service that operates to the Regina General Hospital, Monday to Friday from 6 a.m. to 9 p.m. and provides on-site parking Saturday, Sunday and any Statutory Holiday.
- Streets identified under this option are near or are an extension of the street sections already approved under the program. This would promote a better level of awareness about the program amongst residents.
- Due to the high volume of vehicles parked in these areas, the movement of traffic in these areas would be improved during the winter months.
- This option will provide minimal operational challenges for Administration, as the street sections are close together.

Disadvantages:

- This option will still not cover 100 per cent of the street sections in the city with similar challenges during winter, due to on street parking.
- Expansion of the program is dependent on the capacity of the supporting areas like Traffic Engineering, Parking Services and Communications.
- Although alternate parking will be generally available on adjoining streets or blocks for the duration of temporary parking bans, residents may have to park their vehicles away from their regular parking spots. Certain street sections may provide more challenges than others.

- The expanded program may not be the same for all 11 km street sections identified under Option 2. Operational changes will be required to cover certain street sections like hospital routes. Operational changes may include reduced timeframes of parking bans on certain critical streets adjoining the hospital, time of day for plowing operations, as well as an enhanced communication strategy with those affected.

**Option 3 - Cease Snow Route Program:
(Not Recommended)**

This Option considers discontinuing the implementation of a Snow Routes Program in the city. This Option would require removing the permanent Snow Routes signs installed on the 5 km road sections and educating the residents on why the program is being discontinued. This would be despite a successful pilot, encouraging program results and strong initial support from the residents.

Advantages:

- No change in the winter maintenance operation
- No change in the parking services operation
- No communications cost implications
- No additional signage required

Disadvantages:

- Will not satisfy residents desire to have a Snow Routes Program
- Increased costs associated with the removal of snow route signage
- There will be additional communication costs to implement a similar program in future
- No efficiencies will be gained for winter maintenance operation during plowing
- Mobility issues will remain during winter, due to parked vehicles on these streets
- Increased chances of property damage on these streets during winter, due to parked vehicles
- Continued traffic flow issues due to reduced lane widths in the winter

Based on the above, Administration is recommending a phased in expansion of snow routes to other City of Regina (City) streets. The change management approach and benchmarks for success used in the pilot, will be used to evaluate and assess an expanded program during the 2020/2021 season. This will help in further optimizing a Snow Route Program for other parts of the city. See Appendices C and D for details.

The proposed implementation for an expanded program for the 2019/2020 winter season, would allow Administration time to install additional signage, provide communications to residents and collaborate with other departments to ensure an effective approach is in place.

Figure 1. Below indicates the proposed timeline for the implementation of an expanded program.

Figure 1: Snow Routes Expanded Program Timeline



RECOMMENDATION IMPLICATIONS

Financial Implications

The implementation costs for the pilot in the 2017/2018 winter season was \$54,000, of the \$85,000 budgeted. Spending for the pilot was broken down to \$36,000 for communications and \$18,000 on signage. The unused funds could be used for the expansion of the program, if approved by Council.

Capital expenditures for implementing an expanded Snow Route Program on 11 km of the road network would require a total of \$70,000, including \$32,000 for signage and \$38,000 for communications. Revenues and expenditures of Parking Services are not included here, as the enforcement costs proved to be negligible and ticketing revenue exceeded the operating costs.

Expanding the program is expected to result in operational efficiencies. Evaluation of the efficiencies gained will be completed after the successful implementation of the expanded program.

Environmental Implications

Expanding the Snow Routes Program will have a positive environmental impact, due to the improved traffic flow, resulting in reduced fuel consumption and exhaust emissions.

Policy and/or Strategic Implications

The Snow Routes Program expansion will assist Winter Maintenance crews in providing safe transportation, better mobility and accessibility on city streets and is in line with *the Design Regina: The Official Community Plan (OCP)* as follows:

Section D3, Transportation, Goal 1-Sustainable Transportation, 5.4. “Establish all-season design and maintenance priorities for roads, sidewalks and pathways to ensure the transportation network provides safe travel, access and mobility, including for the following:

- 5.4.1 Key transit facilities
- 5.4.2 Key pedestrian and cycling routes
- 5.4.3 Public buildings and institutions”

Other Implications

Analysis of the pilot indicates that expansion of the program will result in increased efficiencies of winter maintenance operations, reduced claims due to property damage, improved driving conditions and provide safer roads for residents. Properly cleared streets will help create a more positive image of the City in the eyes of residents, businesses and visitors.

Accessibility Implications

Administration will continue contact with residents with accessibility and parking issues and will monitor Service Regina calls for any concerns related to mobility.

COMMUNICATIONS

Multiple communication channels will be used to ensure that residents are well informed about the expanded program. This will include focused communications for snow routes in the vicinity of the hospital as well as communications regarding the changes to the *Regina Traffic Bylaw, No. 9900*.

DELEGATED AUTHORITY

The recommendations contained in this report require City Council approval.

Respectfully submitted,



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Respectfully submitted,



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